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Global Standard for Responsible Supply of Marine Ingredients

Fishery Assessment Methodology and Template Report V2.0

Fishery Under Assessment	**Albacore tuna (*Thunnus alalunga*)**
Date	**July 2018**
Assessor	**V. Polonio**

Application details and summary of the assessment outcome				
Name: TC Union Agrotech Co Ltd and others				
Address:				
Country: Thailand		**Zip:**		
Tel. No.:		**Fax. No.:**		
Email address:		**Applicant Code**		
Key Contact:		**Title:**		
Certification Body Details				
Name of Certification Body:		**SAI Global**		
Assessor Name	**Peer Reviewer**	**Assessment Days**	**Initial/Surveillance/Re-approval**	**Whole fish/ By-product**
V. Polonio	J. Daly	1	Surveillance 1	By-product
Assessment Period	2017			

Scope Details	
Management Authority (Country/State)	IOTC
Main Species	Albacore tuna (*Thunnus alalunga*)
Fishery Location	FAO 31 (Atlantic Western Central)
Gear Type(s)	Longline, pole and line, purse seine, troll, baitboats
Outcome of Assessment	
Overall Outcome	PASS
Clauses Failed	NONE
Peer Review Evaluation	PASS
Recommendation	PASS

Assessment Determination
The stock is managed by the International Commission for the Conservation of Atlantic Tunas (ICCAT) and more specifically by Scientists from the Standing Committee on Research and Statistics (SCRS). In their 2016 assessment SCRS complied historical catch and CPUE (Catch per Unit Effort) data for the Northern Stock (ALB-N, Subcomponent AL-32). Fishery removals of the species in the fishery under assessment are included in the stock assessment process. Relative abundance indices compiled from data modelling show that North Atlantic albacore has continued to increase over the last decades and is likely to be somewhere in the green area of the Kobe plot. Results using a number of stock assessment models showed that although the range of estimated management benchmarks was relatively wide, most models were in agreement that the stock was overfished, but not currently undergoing overfishing (Anon., 2014). ICCAT did not recommend an increase of the TAC based on the 2016 assessment. IUCN have listed albacore tuna as near threatened; the species does not appear in the CITES appendices (both sites accessed 13.07.2018). The assessment team recommends the approval of albacore tuna (FAO 31) as a by-product species under the current IIFO RS Standard (By-product) v 2.0.
Peer Review Comments
Ongoing work on Management Strategy Evaluation (MSE), Reference Points (RP) and Harvest Control Rules (HCR) by SCRS aim to contribute to potential decisions that the Commission may take with regards to a candidate Harvest Control Rule (HCR) for this stock. Future assessments should take these studies into consideration.
Notes for On-site Auditor

Note: This table should be completed for whole fish assessments only.

General Results

General Clause	Outcome (Pass/Fail)
M1 - Management Framework	
M2 - Surveillance, Control and Enforcement	
F1 - Impacts on ETP Species	
F2 - Impacts on Habitats	
F3 - Ecosystem Impacts	

Species-Specific Results

Category	Species	% landings	Outcome (Pass/Fail)	
Category A			A1	
			A2	
			A3	
			A4	
Category B				
Category C	Albacore tuna (*Thunnus alalunga*)	N/A	PASS	
Category D				

[List all Category A and B species. List approximate total %age of landings which are Category C and D species; these do not need to be individually named here]

HOW TO COMPLETE THIS ASSESSMENT REPORT

This assessment template uses a modular approach to assessing fisheries against the IFFO RS standard.

Whole Fish

The process for completing the template for a **whole fish** assessment is as follows:

1. ALL ASSESSMENTS: Complete the Species Characterisation table, to determine which categories of species are present in the fishery.
2. ALL ASSESSMENTS: Complete clauses M1, M2, M3: Management.
3. IF THERE ARE CATEGORY A SPECIES IN THE FISHERY: Complete clauses A1, A2, A3, A4 for **each** Category A species.
4. IF THERE ARE CATEGORY B SPECIES IN THE FISHERY: Complete the Section B risk assessment for **each** Category B species.
5. IF THERE ARE CATEGORY C SPECIES IN THE FISHERY: Complete clause C1 for **each** Category C species.
6. IF THERE ARE CATEGORY D SPECIES IN THE FISHERY: Complete Section D.
7. ALL ASSESSMENTS: Complete clauses F1, F2, F3: Further Impacts.

A fishery must score a pass in **all applicable clauses** before approval may be recommended. To achieve a pass in a clause, the fishery/species must meet **all** of the minimum requirements.

By-products

The process for completing the template for **by-product raw material** is as follows:

1. ALL ASSESSMENTS: Complete the Species Characterisation table with the names of the by-product species and stocks under assessment. The '% landings' column can be left empty; all by-products are considered as Category C and D.
2. IF THERE ARE CATEGORY C BYPRODUCTS UNDER ASSESSMENT: Complete clause C1 for **each** Category C by-product.
3. IF THERE ARE CATEGORY D BYPRODUCTS UNDER ASSESSMENT: Complete Section D.
4. ALL OTHER SECTIONS CAN BE DELETED. Clauses M1 - M3, F1 - F3, and Sections A and B do not need to be completed for a by-product assessment.

By-product approval is awarded on a species-by-species basis. Each by-product species scoring a pass under the appropriate section may be approved against the IFFO RS Standard.

SPECIES CATEGORISATION

The following table should be completed as fully as the available information permits. Any species representing more than 0.1% of the annual catch should be listed, along with an estimate of the proportion of the catch each species represents. The species should then be divided into Type 1 and Type 2 as follows:

- **Type 1 Species** can be considered the 'target' or 'main' species in the fishery. They make up the bulk of annual landings and are subjected to a detailed assessment.
- **Type 2 Species** can be considered the 'bycatch' or 'minor' species in the fishery. They make up a small proportion of the annual landings and are subjected to relatively high-level assessment.

Type 1 Species must represent 95% of the total annual catch. Type 2 Species may represent a maximum of 5% of the annual catch (see Appendix B).

Species which make up less than 0.1% of landings do not need to be listed (NOTE: ETP species are considered separately). The table should be extended if more space is needed. Discarded species should be included when known.

The 'stock' column should be used to differentiate when there are multiple biological or management stocks of one species captured by the fishery. The 'management' column should be used to indicate whether there is an adequate management regime specifically aimed at the individual species/stock. In some cases it will be immediately clear whether there is a species-specific management regime in place (for example, if there is an annual TAC). In less clear circumstances, the rule of thumb should be that if the species meets the minimum requirements of clauses A1-A4, an adequate species-specific management regime is in place.

NOTE: If any species is categorised as Endangered or Critically Endangered on the IUCN Red List, or if it appears in the CITES appendices, it **cannot** be approved for use as an IFFO RS raw material. This applied to whole fish as well as by-products.

TYPE 1 SPECIES (Representing 95% of the catch or more)
Category A: Species-specific management regime in place.
Category B: No species-specific management regime in place.

TYPE 2 SPECIES (Representing 5% OF THE CATCH OR LESS)
Category C: Species-specific management regime in place.
Category D: No species-specific management regime in place.

Common name	Latin name	Stock	% of landings	Management	Category
Albacore tuna	*Thunnus alalunga*	ALB-N stock, subcomponent AL32	N/A	ICCAT	C

CATEGORY C SPECIES

In a whole fish assessment, Category C species are those which make up less than 5% of landings, but which are subject to a species-specific management regime. In most cases this will be because they are a commercial target in a fishery other than the one under assessment. In a by-product assessment, Category C species are those which are subject to a species-specific management regime, and are usually targeted species in fisheries for human consumption.

Clause C1 should be completed for **each** Category C species. If there are no Category C species in the fishery under assessment, this section can be deleted. A Category C species does not meet the minimum requirements of clause C1 should be re-assessed as a Category D species.

Species Name			
C1	**Category C Stock Status - Minimum Requirements**		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	PASS
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	PASS
		Clause outcome:	PASS

Evidence

Fisheries Management in Thailand:

The Fisheries Act is the principal legislative instrument dealing with fisheries and the cultivation of aquatic animals in the country. The act is administered by the Ministry of Agriculture and Cooperatives (MAC). Its Department of Fisheries (DOF) is the principal government agency responsible for managing and developing fisheries and aquaculture. Its mandate and structure are set out in the Royal Decree on Administration (1994), which provides DOF with the authority and responsibility to (*inter alia*) :

- Apply, implement and enforce the Fisheries Act and other relevant laws related to fishery matters.
- Study, research and develop aquatic resources, the aquatic environment, aquaculture, fish enhancement including genetic research and fishing gear.
- Survey, explore, analyse and research fishery grounds within and outside Thai waters.

Current Thai fisheries management objectives are set out in the Fisheries Management Plan (FMP). This plan includes different measures to manage the fleet targeting tuna such as:

- The issuing of valid fishing permits from DOF.
- Compliance with all Vessel Monitoring Systems (VMS) Legislation.
- All laws, recommendations and regulations linked with (Regional Fishery Management Organisations (RFMOs) and
- Implementation of the Port State Measures (PSM) Programme.

ICCAT:

The International Commission for the Conservation of Atlantic Tunas (ICCAT) is an intergovernmental organization responsible for the management and conservation of tuna and tuna-like species in the Atlantic Ocean. Scientists from the Standing Committee on Research and Statistics (SCRS) analyse fisheries statistics and advise the Commission on the need for specific conservation and management measures.

These measures include gear and vessel restrictions, limited entry, seasonal and regional closures, and some country-specific quotas. ICCAT also provides periodical stock assessments and management advice.

Albacore tuna:

Albacore (*Thunnus alalunga*) has been caught in the assessment area as a by-catch of the tuna catch of the Venezuelan large pelagic (long line) fisheries over the past 25 years. SCRS analysed the spatial and temporal size distribution of northern albacore recorded by the Venezuelan pelagic longline observer programs. The group recommended further research in order to better understand reproduction of northern albacore in the area. Other SCRS studies have also provided catch statistics on the EU-Portugal (Madeira) baitboat fishery operating in Madeira and Azores.

Species-specific stock assessments:

In FAO 31 there are three different stocks controlled by ICAAT; in the area under assessment the species is evaluated as ALB-N stock, subcomponent AL32. The SCRS Report (ICCAT 2016) compiled catch data by major gear for this stock (1930-2014). Overall catches show a decreasing trend since 2006 (~37000 t) reaching a minimum of about 20000 t in 2011. This decline in catches was mostly due to the decrease in the catches of the baitboat and troll fisheries in the Cantabrian Sea (Spanish fleet).

Since 2012, overall catches increased slightly to a maximum of about 26500 t in 2014, caused mostly by an increase in the catches of the European trawl and baitboat fisheries of Canarias, Azores and Madeira, as well as Japanese and Chinese Taipei longline fisheries (especially in 2013). The SCRS report also revised Catch per Unit Effort (CPUE) data based on new information provided from the fleets, including the Venezuelan pelagic longline fleet. Fishery removals of the species in the fishery under assessment are included in the stock assessment process.

Relative abundance indices compiled by SCRS from data modelling show that the stock has continued to increase over the last decades and was likely somewhere in the green area of the Kobe plot, however without additional information, the magnitude of the recovery was not well determined and remains sensitive to many different assumptions.

In the 2013 SCRS assessment, several model formulations (MFCL, SS3, VPA and ASPIC) with varying degrees of complexity were used. This allowed to model different scenarios that represented different hypotheses, and to characterize the uncertainty around the stock status. Results showed that although the range of estimated management benchmarks was relatively wide, most models were in agreement that the stock was overfished, but not currently undergoing overfishing (Anon 2014).

ICCAT recommends setting the objective of maintaining the stock in the green area of the Kobe plot (with a 60% probability) while maximizing long-term yield, and, if B<BMSY, to recover it as soon as possible, while maximizing average catch and minimizing inter-annual fluctuations in TAC levels. ICCAT did not recommend an increase of the TAC based on the 2016 assessment.

In the FAO area 31, IUCN reported catches of this species in the north Atlantic peaked at 65,000 tonnes in the mid-1960s, then declined to a low of 20,000 tonnes in 2008. In the last stock assessment the biomass was over 40% of BMSY. Therefore, globally, the species is listed as Near Threatened, primarily as population declines would be much greater if it were not for the catch quotas that have been implemented.

The IUCN have listed albacore tuna as near threatened; the species does not appear in the CITES appendices (both sites accessed 12.07.2018).

The assessment team recommends the approval of albacore tuna (FAO 310 as a by-product species under the current IIFO RS Standard (By-product) v 2.0

References

- Anon (2016) ICCAT Report: REPORT OF THE 2016 ICCAT NORTH AND SOUTH ATLANTIC ALBACORE STOCK ASSESSMENT MEETING 99pp https://www.iccat.int/Documents/Meetings/Docs/2016_ALB_REPORT_ENG.pdf
- Anon (2014) ICCAT Report: REPORT OF THE 2014 ICCAT NORTH AND SOUTH ATLANTIC ALBACORE STOCK ASSESSMENT MEETING: Executive Summary https://www.iccat.int/Documents/Meetings/Docs/2014_ALB_REPORT_EXECUTIVE SUMMARY.pdf
- Anon FAO country fisheries overview, Thailand: http://www.fao.org/fishery/facp/THA/en
- Thailand Department of Fisheries Management Plan (FMP): https://fisheries-refugia.org/downloads/inception-workshop/docs/21-21-fr-inception-workshop-marine-fisheries-management-plan-thailand/file
- CITES Species Endangered list: http://checklist.cites.org/#/en accessed 13.07.18
- IUCN Red list: http://www.iucnredlist.org/search accessed 13.07.18

Standard clauses 1.3.2.2